IN THE CLAIMS:

Claims 1 – 22, 24 and 25 remain in the application unchanged. Please amend claim 23 and add new claims 26 and 27 as follows:

23. (Amended) A method of determining the location of at least one magneticallysensitive electrically conductive sensing coil affixed to a medical device partially inserted into a body cavity within a navigational domain, comprising the steps of:

inducing within said at least one sensing coil a set of orientation signal values each
representative of an orientation of said at least one sensing coil and independent of a position of said at least one sensing coil;

determining the orientation of said at least one sensing coil using said induced orientation signal values;

inducing within said at least one sensing coil a set of positional signal values each representative of the position of said sensing coil; and

determining the position of said at least one sensing coil using said positional signal values and said determined orientation.

- 26. (New) A method according to claim 23, wherein the location includes a position in three-dimensional space, and the orientation includes an orientation in three-dimensional space.
- 27. (New) A method according to claim 25, wherein the locations include positions in three-dimensional space, and the orientation includes an orientation in three-dimensional space.